THE MODERATING ROLE OF MATERNAL ATTACHMENT ON BORDERLINE PERSONALITY DISORDER FEATURES AND DEPENDENT LIFE STRESS

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ABSTRACT

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Borderline Personality Disorder (BPD) affects 1.6% of adolescents and 20% of inpatient adolescents. Life stress has been linked to BPD during childhood, adolescence, and adulthood. Moreover, previous research, in adults, has linked BPD features to dependent stress (i.e., stress that is induced or elicited by the individual rather than the situation). Prior research has not examined dependent stress alongside BPD features in adolescents. Given prior research showing that secure attachment moderates the association between psychopathology and dependent stressful life events in adults, the current study examined attachment security as a buffer against stressful life events, a proposition that has not been evaluated with regard to adolescents with BPD. We hypothesized a moderation model in which (1) BPD features and diagnosis would be positively associated with dependent life stress, (2) secure attachment would be negatively associated with BPD features and diagnosis, and (3) attachment would moderate the relation between BPD and dependent life stress. Results supported the first two hypotheses; BPD diagnosis was significantly, positively associated with dependent life stress, and negatively associated with two attachment variables, maternal availability and dependability. However, no such association was present for two other attachment variables, maternal care and overprotection, nor was there a significant moderating effect of attachment. Contrary to the third hypothesis, no significant evidence that attachment acts as a buffer in the relation between BPD and dependent life stress was found when all three variables were assessed concurrently. Nonetheless, results confirm previously documented relations

between BPD, dependent life stress, and attachment.

KEY WORDS: Attachment, Borderline Personality Disorder, Dependent life stress, Adolescents

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CHAPTER I

Introduction

Borderline Personality Disorder

Borderline Personality Disorder (BPD) is currently defined by the *Diagnostic Statistical Manual—5th edition* (*DSM*-5) as an emotion dysregulation disorder characterized by a consistent pattern of instability within several domains, as well as marked impulsivity in behavior (American Psychiatric Association [APA], 2013). Patients often experience difficulties with interpersonal relationships and self-image due to frequent changes in mood and affect. BPD has been found in 1.6% of the general population, although some estimates predict lifetime occurrence rates as high as 5.9%, making it one of the most commonly experienced personality disorders across the lifetime (APA, 2013). The disorder is also three times more common in females (APA, 2013).

BPD represents a substantial public health problem with serious consequences for both the affected individual and society. BPD frequently lends itself to hospitalization based on the severity of the disorder, as suicidal ideations and suicide completion are often observed (80% and 8-10% respectively; National Institute of Mental Health, [NIMH] 2015). In addition, this population is disproportionately represented among psychiatric inpatients. For instance, patients with BPD constitute 6-10% of the patients seen in primary care and outpatient settings, but 20% of psychiatric inpatient populations (APA, 2013). Moreover, there is substantially high comorbidity with other diagnoses such as Major Depressive Disorder, eating disorders, and anxiety disorders (APA, 2013). In fact, comorbidity is present in 85% of patients with BPD (NIMH, 2015), Furthermore,

BPD has been linked with disproportionately impaired functioning and higher symptom severity, when compared to control groups of patients with other personality disorders, mood or anxiety disorders, or no mental illness (Ansell, Sanislow, McGlashan, & Grilo, 2007). Individuals with BPD are also exceedingly represented in other high-cost settings such as the criminal justice system, prisons, and civil courts (e.g., child custody, divorce; Substance Abuse and Mental Health Services Administration [SAMHSA], 2011). Finally, patients with BPD are more likely to be of low-income status, have less education, use more substances, and be unemployed (SAMHSA, 2011). The public health impact of BPD, simply based upon societal cost, is therefore astoundingly high, especially once the effects on family members and loved ones are additionally taken into account.

BPD is also associated with serious public health problems in adolescents. The disorder currently has a mean age of first diagnosis of 18 years old (Ramos, Canta, Castro, & Leal, 2014). Despite previous objections to BPD being diagnosed during the adolescent years, a great deal of research has supported early diagnosis because the hallmark pervasive patterns of BPD are often first observed during this time, and can assist with prompt intervention (Ramos et al., 2014; Sharp & Bleiberg, 2007). A rapidly growing research base indicates that BPD during adolescence can be reliably assessed, with a longitudinal course often leading to adult BPD (Venta, Herzhoff, Cohen, & Sharp, 2014). Government mental health agencies have additionally supported early diagnosis and argue that this practice is not only valid, but vital to treatment and prognosis (SAMHSA, 2011). Revisions of earlier *DSM* editions have thus allowed for this diagnosis to be made during adolescence, resulting in an upsurge of diagnoses within the adolescent age group over the past decade (Ramos et al., 2014).

The current prevalence rates of BPD during mid to late adolescence are between 0.9% and 3.2% (Johnson, Cohen, Kasen, Skodol, & Oldham, 2008), and these patients constitute approximately half of the adolescent inpatient population (Kaess, Brunner, & Chanen, 2014). BPD symptoms have been linked with poorer outcomes in a wide range of psychosocial domains in adolescent populations including decreased self-image, poorer social skills, and increased sexual behavior, even after controlling for comorbid features of both depression and conduct disorder (Wright, Zalewski, Hallquist, Hipwell, & Stepp, 2015). In addition, suicidal ideation and attempts are not only more common among adolescents with BPD, but are also uniquely associated with the affective instability features of the disorder with this population (Glenn, Bagge, & Osman, 2013). Similar studies have produced the same findings, even when controlling for comorbid depression and substance use problems (Yalch, Hopwood, Fehon, & Grilo, 2014).

The development of BPD has been associated with both genetic and environmental factors in a variety of studies, most notably the biosocial model (Crowell, Beauchaine, & Linehan, 2009; Linehan, 1993). This model suggests that the emotion dysregulation at the core of BPD is generated by a combination of biological and environmental factors. Several studies have supported both aspects of this model. Regarding biological vulnerability, genetic studies have determined that the disorder is five times more prevalent among first-degree relatives when compared to the general population (APA, 2013). While estimates of the heritability coefficient have varied widely, many studies estimate it to be approximately .40, thus accounting for a significant amount of variance in the development of BPD, especially when examining continuous traits rather than diagnostic groups (Bornovalova, Hicks, Iacono, & McGue, 2009). In

adolescents and young adults, heritability coefficient estimates are a bit lower—.30 among 17-year-olds and .20 among 24-year-olds (Blonigen, Carlson, Hicks, Krueger, & Iacono, 2008). Additionally, specific features of BPD, such as affective instability, show greater heritability than others (Glenn et al., 2013). These findings imply that the emergence of BPD is heavily, albeit not exclusively, influenced by non-genetic factors (Bornovalova et al., 2009).

Regarding environmental variables, studies have linked the emergence of BPD to a number of constructs related to an invalidating caregiving environment including insecure attachment styles with caregivers (Schuppert, Albers, Minderaa, Emmelkamp, & Nauta, 2015), abuse and neglect (MacIntosh, Godbout, & Dubash, 2015), and parental insensitivity (Carlson, Egeland, & Sroufe, 2009; Sharp & Fonagy, 2008). Experiences of overall life stress have also been associated with increased BPD symptomatology (Jovev & Jackson, 2006). The broad aim of this study was to explore the interplay between these environmental factors—specifically the caregiving environment and stress, in relation to BPD among adolescent inpatients.

Stress and BPD

The relation between stress and BPD is complex. First, life stress experienced during childhood, adolescence, and adulthood has been positively associated with and is predictive of later BPD symptoms (Jovev & Jackson, 2006; Yen et al., 2005). Intensely stressful events, such as childhood maltreatment and crime victimization, are associated with BPD diagnosis throughout numerous studies, with many studies focusing on links between BPD and sexual abuse (Jovev & Jackson, 2006; SAMHSA, 2011). BPD features have been associated with chronic stress in the context of romantic relationships in

adolescent women (Daley, Burge, & Hammen, 2000), and higher rates of stressful life events in adults (Pagano et al., 2004). Furthermore, environmental variables that may induce stress, such as low family socioeconomic status (SES), parental conflict, parental illness or death, and family welfare support, have each been linked to a higher number of BPD symptoms in adolescents (see Cohen, Crawford, Johnson, & Kasen, 2005, for a review).

Second, stress is thought to exacerbate existing BPD symptoms; for example, the experience of stressful life events predicts the severity of BPD symptoms (Shevlin, Dorahy, Adamson, & Murphy, 2007) and an increased rate of suicide attempts among adults with BPD (Yen et al., 2005). Additionally, women with BPD who experienced experimentally-induced stressors, such as aversive pictures and white noise played through headphones, were more likely to behave impulsively and engage in disinhibited behaviors, specifically measured through performance on the Iowa Gambling Task (Cackowski et al., 2014). Dissociative symptoms have also been linked with the occurrence of stress in adults with BPD (Stiglmayr et al., 2008). Biobehavioral studies additionally demonstrate increased psychobiological arousal in adult women with BPD while in a resting state, but blunted reactivity when a laboratory stressor is induced (Scott, Levy, & Granger, 2013)—pointing to a BPD-related dysfunction in the neurological stress response (Lyons-Ruth, Choi-Kain, Pechtel, Bertha, & Gunderson, 2011). However, no studies to this author's knowledge have demonstrated an association between stress and BPD within a sample of adolescents with the disorder.

Third, individuals with BPD contribute to their own experience of stress (i.e., dependent life stress). As described in the stress generation hypothesis, dependent stress

is induced or elicited by the individual rather than the situation, such as a depressed woman being fired from a job because she misses too much work (Hammen, 1991). Elevations in dependent stress have been found a multitude of times in both adult and adolescent patients with depression (Liu & Alloy, 2010), bipolar disorder (Hosang et al., 2012), anxiety (Conway, Hammen, & Brennan, 2012), and externalizing behaviors (Rudolph, 2008). Dependent life stress is also more common in adults with BPD compared to patients with other personality disorders (Perry, Lavori, Pagano, Hoke, & O'Connell, 1992) and, for individuals with BPD, poorer psychosocial functioning is associated with increased stress (Pagano et al., 2004). These findings have been echoed in older adults, in which interpersonal dependent stressful life events, such as breaking off a steady relationship or separating from one's spouse, were predicted by earlier BPD symptoms (Powers, Gleason, & Oltmanns, 2013). However, BPD symptoms did not predict independent stressful life events, nor were these interpersonal stressors predicted by symptoms of any other type of personality disorder (Powers et al., 2013). Additionally, dependent stressful life events cause an increased amount of suffering to adult patients with BPD— more so than independent stressful events, via increased occurrence and severity of comorbid depressive episodes (Perry et al., 1992). No study to this author's knowledge has assessed the relation between BPD features and dependent life stress in an inpatient adolescent population.

The role of stress in psychopathology is particularly relevant for adolescents. Adolescence is arguably one of the most stressful developmental stages, and the threat of stressful events is two-fold: stressful events occur more often in teens, and teens demonstrate increased sensitivity to stress. There are numerous reasons why adolescents

experience increased stress, including increased neurological development and pruning, interpersonal relationships becoming ever more important, and a struggle for autonomy with a simultaneous need for care/dependence (Casey et al., 2010). During this developmental stage, stress emanates from a variety of contexts, including both intrapersonal and interpersonal domains. For instance, identity formation may generate a considerable amount of intrapersonal stress, in which adolescents feel increased pressure to become autonomous from the family unit (Compas & Wagner, 1991). Furthermore, social interactions with peers, family members, and romantic partners can create interpersonal stress, an area which is often particularly difficult for patients with BPD (Compas & Wagner, 1991; Powers et al., 2013).

In addition, adolescents are more sensitive to stressful life events due to biologically-based vulnerability, and the social ramifications of stress are more salient to adolescents due to the high amount of importance adolescents place on their social interactions (Compas & Wagner, 1991). Adolescents show increased sensitivity and responsivity to stressful situations, including changes in neuron morphology (Padival, Blume, Vantrease, & Rosenkranz, 2015), demonstrating an amplified biological vulnerability for stress (Sumter, Bokhorst, Miers, Van Pelt, & Westenberg, 2010). Furthermore, adolescents are more at risk for suicidal ideations when stressful events occur (Buitron et al., 2016), and overall, life stress experienced during adolescence has been linked to an increased number of BPD symptoms (Conway, Hammen, & Brennan, 2015; Jovev & Jackson, 2006). These studies illustrate the reality that adolescents experience frequent stressful events and are vulnerable to the experience of stress, highlighting the importance of considering stressful life events with regard to adolescent

mental health.

Given prior research linking BPD to dependent stress in adults, and a lack of research examining this association in adolescents, an age-group at particular risk for stress and emerging psychopathology, the first aim of the current study was to examine relations between BPD and dependent life stress among inpatient adolescents. A number of typical behaviors associated with BPD include substance abuse, engaging in aggressive behaviors, having an unstable mood, rule breaking, lower academic achievement, and suicidal or self-harming behaviors that warrant hospitalization (APA, 2013; Conway et al., 2015; NIMH, 2015)—certainly these behaviors could produce stress for the individual and these behaviors are, at least in some instances, dependent stressors. Thus, we hypothesized there would be a positive association between these constructs, such that adolescents who meet diagnostic criteria for BPD, or who have a higher number of BPD symptoms, would demonstrate more dependent stress than psychiatric inpatients with other diagnoses (e.g., anxiety, depression), as this relationship has been supported in adult samples with BPD (Pagano et al., 2004). Although many of these behaviors at subclinical levels are considered normative during adolescence (Liu, 2004), the severity of these behaviors, and perhaps the subsequent experience of stress, would presumably be intensified for adolescents with BPD.

Attachment and Adolescent BPD

A key variable to consider in the relation of stress and BPD is the caregiving environment, which is a significant feature in the development of BPD according to the biosocial model (Linehan, 1993). Attachment has been defined as the internal working model one forms of themselves and others based on early caregiving experiences, and

this internal working model guides future beliefs and interactions with others (Bowlby, 1982; Levy, 2005; Rholes, Simpson, Tran, Martin, & Friedman, 2007). A secure attachment style is based in caregiving experiences that provided a secure base for the child to feel comfortable to explore the surrounding environment, knowing the parent can provide support if needed (Main & Cassidy, 1988; Van Ryzin & Leve, 2012). Conversely, an insecure attachment style is associated with unreliable, frightening, or frightened caregiver behavior. Maternal attachment has been the most thoroughly researched form of attachment security; a secure attachment style with one's maternal caregiver is predictive of a variety of long-term positive outcomes including increased emotion regulation, improved mentalizing skills, reduced psychopathology, improved treatment response, and healthy peer relationships in adolescents (Kim, Sharp, & Carbone, 2014; Venta & Sharp, 2014; Venta, Sharp, & Newlin, 2015).

In the general adolescent population, secure attachments are present in approximately 66% of mother-child relationships (Shmueli-Goetz, Target, Fonagy, & Datta, 2008). Insecure attachments constitute the remaining percentage of relationships, and are often categorized into three different subtypes: avoidant/dismissing, anxious/ambivalent, and disorganized/unresolved (Ainsworth, Blehar, Waters, & Wall, 1978; Fraley, Davis, & Shaver, 1998; Main & Solomon, 1990). Avoidant/dismissing attachments are characterized by a lack of emotionality on the part of the child, and within adults, also includes an overly negative expectation of others to be clingy or dependent (Fraley et al., 1998). In contrast, anxious/ambivalent attachments involve an overabundance of emotionality, as well as an excessively negative view of oneself and overly positive evaluation of others (Fraley et al., 1998). Finally, disorganized/unresolved

attachments include a range of behaviors, such as apprehension, conflicted feelings, and an overall lack of trust in others (Main & Solomon, 1990). Interestingly, the disorganized/unresolved subtype is the attachment style most frequently associated with stressful family environments, such as experiences of child maltreatment, parental conflict, and parental psychopathology (Lyons-Ruth & Jacobvitz, 1999). Furthermore, it has the highest rate of later child psychopathology of the insecure attachment styles, including dissociative symptoms that appear by late adolescence (Lyons-Ruth & Jacobvitz, 1999), a symptom that commonly presents with BPD (APA, 2013).

Among adult patients with BPD, secure attachments are much less common (0-30%; Agrawal, Gunderson, Henderson, & Lyons-Ruth, 2004). A meta-analysis conducted by Agrawal and colleagues (2004) found that the overwhelming majority of adult patients with BPD were found to fall into either the anxious/ambivalent category, or were classified as having a disorganized attachment. For instance, in one study that was examined, 89% of the participants were found to have a disorganized/unresolved attachment (Fonagy et al., 1996). Additional studies have supported these findings in adult patients with BPD, and linked the presence of an insecure attachment with later BPD symptoms (Deborde et al., 2012).

While no studies have examined the rates of secure and insecure attachments within a population of adolescents with BPD (Sharp et al., 2016), there is evidence to suggest that adolescent BPD and attachment style are related. For instance, in a normative adolescent sample, inconsistent maternal parenting style and maternal over-involvement were found to be positively correlated with a later diagnosis of BPD (Bezirganian, Cohen, & Brook, 1993). In addition, within a sample of adolescent

inpatients, maternal care has been negatively associated with BPD diagnosis and symptom severity (Infurna et al., 2016). Finally, maternal parenting qualities such as adolescent-perceived maternal overprotection, maternal psychopathology, and parental absence have all been linked with BPD symptom severity (Schuppert et al., 2015; Levy, Johnson, Clouthier, Scala, & Temes, 2015). These studies thus consistently demonstrate insecure attachment as a risk factor for BPD features in an adolescent population (Deborde et al., 2012; Levy et al., 2015; Schuppert et al., 2015).

For the present study, four specific aspects of adolescents' attachment relationships were considered. These included the caregiver's availability, dependability, care, and overprotection (Van Ryzin & Leve, 2012; Gladstone & Parker, 2005). Availability and dependability are modeled on Bowlby's (1982) theory of attachment, while care and overprotection describe the "responsiveness" and "control/demandingness" dimensions of Baumrind's (1971) paradigm, respectively. Availability describes whether or not the parent is accessible and responsive to the child (Van Ryzin & Leve, 2012). In addition, dependability is the child's ability to trust and depend upon the parent (Venta, Shmueli-Goetz, & Sharp, 2014). Care describes the amount of warmth and affection that is given by the parent, in which lower amounts of warm behaviors and high amounts of hostile behaviors are often associated with later child psychopathology (Gladstone & Parker, 2005). Furthermore, overprotection refers to the amount of control the parent asserts over the child, in contrast to the level of autonomy the child is allowed to exert (Gladstone & Parker, 2005). While a moderate level of protection is associated with more positive outcomes, overprotectiveness intrudes on the child's ability to develop complex skills, such as self-regulation (Gladstone &

Parker, 2005). The secure attachment style thus incorporates high levels of availability, dependability, and care, with low levels of overprotection.

To date, no studies have examined adolescent BPD and these attachment-related variables (i.e., availability, dependability, care, and overprotection); thus, the second aim of this study was to explore how BPD diagnosis and features relate to aspects of the caregiving environment including these variables. We hypothesized BPD would be negatively correlated with availability, dependability, and care features of the attachment style, and positively correlated with overprotection within an inpatient adolescent population. These findings have been supported in adult and other adolescent BPD populations, lending credence to the hypotheses of the current study (Carlson et al., 2009; Van Ryzin & Leve, 2012).

The Interaction between Stress and Attachment in Adolescent BPD

Because attachment can also serve a protective function against psychopathology, it may be a significant factor in the relation between stress and BPD. Findings of several studies with community samples have supported attachment security as a buffer against the effects of life stress, ranging from adversity experienced during the antenatal period (Bergman, Sarkar, Glover, & O'Connor, 2008), through adolescence (London, Lilly, & Pittman, 2015) and adulthood (Chow & Ruhl, 2014). In clinical samples, these same associations have been documented in patients with externalizing symptoms, internalizing symptoms, depression, and Posttraumatic Stress features (London et al., 2015; Muller, Thornback, & Bedi, 2012). Attachment has been modeled as both a moderator and mediator in a variety of contexts involving life stress, including with various types of child maltreatment such as sexual, physical, and psychological abuse

(London et al., 2015; Suzuki & Tomoda, 2015). The buffering of psychological consequences in the presence of a secure attachment echoes Bowlby's theory, in which a secure attachment provides the child with a safe place to seek comfort and assistance when external occurrences cause distress, thereby mitigating the impact of those events (Bowlby, 1982). Moreover, research has suggested that positive caregiver relationships, characterized by trust (a correlate of attachment security), can indeed buffer against the emergence of internalized maladjustment in the context of stress (Rotenberg, Venta, & Sharp, under review) and, additionally, buffer the effects of depression on subsequent suicide attempts among inpatient adolescents (Venta, Hatkevitch, Rotenberg, & Sharp, under review).

Regarding dependent stress specifically, secure attachment has been linked with decreased occurrences of dependent life stress in a depressed population (Bottonari, Roberts, Kelly, Kashdan, & Ciesla, 2007). Indeed, attachment style was found to moderate the association between severity of mental illness and dependent stressful life events in depressed adults (Bottonari et al., 2007), such that there was a significant, positive relation between depression and dependent stressful life events among individuals with an insecure attachment, but not those with a secure attachment. The proposed mechanism by which this may occur is either through these individuals fearing closeness with another individual and intentionally generating stress, or perceiving interpersonal stress as satisfactory and rewarding (Bottonari et al., 2007). However, this study was conducted with adults, attachment was conceptualized as avoidance and anxiety rather than the four different attachment domains mentioned earlier, and no research has been conducted regarding the role of attachment in dependent stress among

adults or adolescents with BPD. Still, the findings of Bottonari and colleagues (2007) suggest attachment security acts as a buffer or protective factor against dependent stress generation, among individuals with psychopathology. Because this proposition has not been evaluated with regard to adolescents with BPD, the third aim of this study was to examine attachment as a moderator of BPD symptoms and dependent life stress. We hypothesized that evidence of a significant moderation would occur, such that the relation between BPD and dependent life stress would be significantly stronger for individuals with more insecure attachments, compared to individuals with more secure attachments.

The Present Study

The current study examined the relation between BPD features and diagnosis, and dependent life stress in a sample of low-income adolescent inpatients, as well as explored how the attachment environment (i.e., parental availability, dependability, care, and overprotection) may moderate this association. Our aims included examining (1) the relation between BPD and dependent life stress, (2) the relation between attachment and BPD, and (3) the potential role of attachment as a moderator of the association between BPD and dependent life stress in adolescent inpatients. To this end, we hypothesized a moderation model in which (1) BPD features and diagnosis would be positively associated with dependent life stress, (2) measures of secure attachment would be negatively associated with BPD features and diagnosis, and (3) measures of attachment security would moderate the relation between BPD and dependent life stress, such that measures of secure attachment would act as a buffer against the effect of BPD features and diagnosis on dependent life stress.

The existing literature has thus far not explored a moderation model, in which

attachment moderates the association between BPD features and life stress. Understanding how attachment may change the relation between BPD and dependent life stress could impact adolescents who have BPD, and identify those individuals whose caregiving environment may place them at higher risk of experiencing dependent stress. While current treatments such as Dialectical Behavior Therapy (DBT; Linehan et al., 2006) and Mentalizing Based Therapy (MBT; Bateman & Fonagy, 2006) do focus on the patient's family at times, the results of the current study could justify further involvement of the caregiver in this process and inclusion of therapies that concentrate on improving attachment relationships (NIMH, 2015). In addition, no BPD treatment to this author's knowledge has centered on the psychoeducation of caregivers regarding the specific occurrence of dependent life stress. If the latter was documented as a significant correlate of adolescent BPD, prominent discussion of dependent life stress in treatment would be warranted. Indeed, behavior-dependent stressors are more modifiable than independent sources of stress, and can theoretically be changed to produce more positive outcomes (Liu, 2013). For example, recommendations to focus on the utility of problem-solving in order to reduce dependent life stress have been made for depressed individuals (Liu, 2013); similar strategies may prove useful for adolescents with BPD. These types of therapies have been theorized to be particularly effective within an adolescent population, wherein dependent life stress accounts for more negative mental health outcomes than independent life stress (Ozer, MacDonald, & Irwin, 2002).

CHAPTER II

Methods

Participants

The aforementioned aims were examined via archival data collected from 184 participants from a public inpatient adolescent psychiatric facility in a large metropolitan city in the Southwestern United States. Parental consent for the study was sought at the time of admission. Participants who had been admitted to the facility and received parental consent were approached for youth assent after their intake. Inclusion criteria for this study were an age between 12 and 17 years old and English fluency. Adolescents were excluded from study participation if psychosis or intellectual disability was noted during the admission evaluation by clinicians, or if consent or assent was denied. The current study focused on a sample of inpatient adolescents who completed measures of BPD features and diagnosis, attachment, and dependent life stress. It should be noted that the present study is a subset of a larger, ongoing study that has included a larger number of participants assessed with different measures (i.e., Buitron et al., 2016; Hill et al., 2015; Noblin, Venta, & Sharp, 2014; Vetna, Mellick, Shatte, & Sharp, 2014; Venta & Sharp, 2013; and Venta, Ross, Schatte, & Sharp, 2012). Relevant to this study, 544 adolescents and their parents were approached for consent/assent. Of these, four adolescents revoked their assent, four parents revoked their consent, 178 adolescents were discharged prior to measures being completed, 64 erroneously consented, 41 were excluded, and 69 declined participation. Therefore, the sample in the current study consisted of 184 participants. Of these, 22.3% (n = 41) were African American, 29.9% (n = 55) were Caucasian, 39.7% (n = 73) were Hispanic, 0.5% (n = 1) were Southeast Asian,

6.0% (*n* = 11) were multiracial, and 1.6% (*n* = 3) were of another race/ethnicity. Additionally, 65.8% (*n* = 121) were female, and the average age was 14.72 years (*SD* = 1.42).

Measures

Dependent life stress was measured via the University of California Los Angeles (UCLA) Life Stress Interview's dependent life stress subscale (Hammen, 1991). This interview has been used in both adults and adolescents in a variety of contexts, including inpatient, community, and control populations (Hammen Lab, 2015). The interview is semi-structured, and to assess for episodic stressful events, interviewers administered an adolescent events checklist which included events that are commonly cited as stressful (Compas, Davis, Forsythe, & Wagner, 1987). If any of these occurred during the previous 3 months, they were discussed in greater detail. Participants were also asked to list any other episodic events that were relevant for them, but were not on the list. All events that occurred during the 3 months prior to the interview, and caused at least mild stress for the participant, were included as episodic stress events. Interviewers then obtained information regarding the nature, duration, and impact of the episodic events.

During separate consensus meetings composed of trained research assistants, a group of coders determined where each episodic event was positioned on a continuum ranging from independent (1= fateful or outside the control of the individual) to dependent (5 = completely dependent upon the individual). In order to dichotomize each event as either independent or dependent, a cutoff of 3 was used, according to the procedure outlined by Hammen, Shih, and Brennan (2004). In prior research, this measure has demonstrated adequate reliability and predictive validity among adolescent

samples (Hammen, Rudolph, Weisz, Rao, & Burge, 1999; Rudolph & Hammen, 1999), including high inter-rater reliability when utilizing consensus rating (Kim, Miklowitz, Biuckians, & Mullen, 2007). For the present study two metrics of dependent stress were used: (1) a count of dependent stressful life events, and (2) the average severity of stressful life events for each participant.

Borderline features and diagnosis were assessed with the Childhood Interview for BPD (CI-BPD), which has demonstrated strong validity of BPD symptoms in previous adolescent samples (Sharp, Ha, Michonski, Venta, & Carbone, 2012). The interview is semi-structured, and contains nine questions pertaining to BPD symptoms in which a score of 0 (absent), 1 (probably present), or 2 (definitely present) can be assigned. In order to receive a full diagnosis of BPD, the individual must score a 2 on at least five of these criteria. However, the CI-BPD can also capture BPD symptoms through a dimensional lens, rather than categorically, by counting the number of symptom domains in which a score of 2 was assigned (Sharp et al., 2012). For the purposes of the current study, both categorical and dimensional ratings of BPD were examined such that adolescents received both a diagnostic category as well as a dimensional symptom score; henceforth, these variables are referred to as "BPD diagnosis" and "BPD features," respectively. The psychometric properties of this tool were examined by Sharp and colleagues (2012), and it was found to have good internal reliability, inter-rater reliability, convergent validity, criterion validity, and concurrent validity. Furthermore, a confirmatory factor analysis of the CI-BPD demonstrated an adequate fit for a unidimensional factor structure (Sharp et al., 2012). In the current study, 58 participants (31.5% of the sample) met criteria for being diagnosed with BPD.

Attachment was measured via two different self-report scales in order to account for four aspects of attachment (i.e., availability, dependability, care, and overprotection). Participants were instructed to answer these questionnaires in terms of their relationship with their maternal caregiver, to ensure consistency across the sample. Availability and dependability were assessed with the Kerns Security Scale (SS). This scale is a 15-item questionnaire designed specifically for adolescents, in which there are two parts for each question representing opposite ends of a spectrum (Van Ryzin & Leve, 2012). For instance, one item states, "Some kids find it easy to trust their mom BUT other kids are not sure if they can trust their mom." Participants rated whether each of these clauses was "sort of true" or "really true" for them resulting in a possible score of 1 to 4 for each item. The total score was calculated by summing the individual items, and higher scores indicate increased availability and dependability, reflected on separate scales (Van Ryzin & Leve, 2012). The SS has previously been established to have strong validity (Van Ryzin & Leve, 2012), high agreement with an interview-based measure among inpatient adolescents (Venta, Shmueli-Goetz, & Sharp, 2014), as well as adequate internal consistency and test-retest reliability (Kerns, Schlegemilch, Morgan, & Abraham, 2005). Furthermore, factor analyses have supported the unidimensional structure of the scale (Verschueren & Marcoen, 2005). Cronbach's alpha in the present study was high for both subscales (Availability, $\alpha = .85$, and Dependability, $\alpha = .84$).

Additionally, the Parental Bonding Instrument (PBI) was used to assess parental care and overprotection. This measure is a 25-item questionnaire using a 4-point Likert-type rating scale (very unlike, somewhat unlike, somewhat like, and very like) in which higher scores indicate increased care and overprotection (Parker, Tupling, & Brown,

1979). Questions include statements about the participant's mother such as, "[She] spoke to me in a warm friendly voice" or, "[She] did not want me to grow up" (Parker et al., 1979). Overprotection was reverse coded such that higher scores indicate decreased occurrence of overprotectiveness. Internal consistency and test-retest reliability have been demonstrated to be adequate (Parker et al., 1979), and concurrent validity with an interview-based measure of attachment has been supported for the Care scale (Venta et al., 2014). Cronbach's alpha in the present study was adequate for both the Care ($\alpha = .89$) and Overprotection ($\alpha = .77$) subscales.

Procedures

This study examined archival data that was collected as part of a study approved by the institutional review boards of the University of Houston and the University of Texas Health Sciences Center. Prior to data analyses, the study was approved by the Sam Houston State University institutional review board as archival research. Procedures for the initial study were as follows: consent was first obtained from patients' guardians at the time of admission. If granted, assent was also sought from participants prior to any interviews taking place. Demographic information was acquired first, followed by the Childhood Interview for BPD, Kerns Security Scale, Parental Bonding Instrument, and UCLA Life Stress Interview. Adolescents were paid $30 in the form of a gift card for participating. All study procedures were conducted independently and in private by interviewers who had been trained on study measures, and received supervision from the study's principal investigator (Carla Sharp, Ph.D., University of Houston). Consensus meetings for the life stress measure were held after the assessment was complete. The current author began data collection efforts on this study in 2015, but data utilized in the

current study was all archival.

CHAPTER III

Results

Preliminary Analyses

Demographic data was analyzed via *t*-tests, one-way ANOVAs, and correlational analyses in order to identify possible demographic confounds (sex, race/ethnicity, and age) demonstrating significant relations with key study variables (i.e., BPD, dependent stress, and attachment; see Table 1). Additional preliminary analyses were conducted for the BPD diagnosis variable including a *t*-test with age as the dependent variable, $t(182) = .33$, $p = .75$, in which those participants in the BPD group (M = 14.67, SD = 1.30) were not different from those in the non-BPD group ($M = 14.75$, $SD = 1.48$). Chi-square analyses examining relations between BPD diagnosis and sex were also conducted, $X^2(1, N = 184) = 15.73$, $p < .001$, as well as BPD diagnosis and race/ethnicity, $X^2(6, N = 184) = 12.40$, $p = .05$. Based on sex and race/ethnicity both having significant relations to key study variables, both were included as covariates in multivariate analyses.

Table 1

Preliminary Analyses amongst Demographic and Key Study Variables

	Sex (*t*)	Race/Ethnic (*F*)	Age (*r*)	Mean (*SD*)
BPD Features	3.10**	3.12**	.10	3.19 (2.21)
SS Availability	-3.74***	0.96	.04	2.63 (0.87)
SS Dependability	-1.74	0.76	.02	2.39 (0.76)
PBI Care	-2.84	0.80	.05	21.51 (8.93)

(continued)

	Sex (*t*)	Race/Ethnic (*F*)	Age (*r*)	Mean (*SD*)
PBI Overprotection	1.69	0.21	.05	19.01 (7.41)
Average DLS	-0.98	0.75	.10	2.72 (1.20)

**p < .05, **p < .01, ***p < .001*

Note. BPD = Borderline Personality Disorder; SS = Kerns Security Scale; PBI = Parental Bonding Instrument; DLS = Dependent Life Stress.

Study aims one and two sought to examine relations between (a) BPD and dependent life stress and (b) BPD and attachment. Relations between these variables were explored using correlations for continuous BPD and stress measures (Table 2), and *t*-tests for dichotomous BPD measures. Regarding the first hypothesis, it was noted that the BPD features variable was not significantly correlated with the average dependent life stress score, $r(184) = .08$, $p = .27$. Furthermore, average dependent life stress scores did not differ on the basis of BPD diagnostic status $t(182) = -1.21$, $p = .23$. A Spearman's Rho correlation was conducted for the number of dependent life events, due to this variable's non-normal distribution (Shapiro-Wilk = .82, $p < .001$), in which the number of dependent life events was not significantly correlated with BPD features, $r_s(184) = .11$, $p = .13$, but was positively correlated with BPD diagnosis, $r_s(184) = .14$, $p = .04$. The latter was examined solely with appropriate multivariate analyses.

Regarding the relation between BPD and attachment, no significant association was found between BPD features and the PBI Care scale, $r(184) = -.10$, $p = .19$, or the PBI Overprotection scale, $r(184) = -.01$, $p = .87$. Furthermore, there was no significant difference found for either the Care scale, $t(182) = 1.63$, $p = .11$, or the Overprotection

scale, $t(182) = .76$, $p = .45$, on the basis of BPD diagnosis. Therefore, neither of the PBI scales was included in later multivariate analyses. However, significant negative correlations were noted between BPD features and both the SS Availability scale, $r(184) = -.19$, $p = .01$, and the SS Dependability scale, $r(184) = -.17$, $p = .02$. Additionally, significant group differences were found for both Availability, $t(182) = 3.37$, $p = .001$, and Dependability, $t(182) = 2.87$, $p = .01$, based on BPD diagnosis.

Table 2

Correlations of Key Study Variables

	BPD Features	SS Availability	SS Dependability	PBI Care	PBI Overprotection	Average DLS
BPD Features	---					
SS Availability	-.19**	---				
SS Dependability	-.17*	.62***	---			
PBI Care	-.10	.51***	.59***	---		
PBI Overprotection	-.01	-.31***	-.44***	-.48***	---	
Average DLS	.08	-.02	-.01	-.05	.04	---

(continued)

	BPD Features	SS Availability	SS Dependability	PBI Care	PBI Overprotection	Average DLS

**p < .05, **p < .01, ***p < .001*

Note. BPD = Borderline Personality Disorder; SS = Kerns Security Scale; PBI = Parental Bonding Instrument; DLS = Dependent Life Stress.

Multivariate Analyses

Multivariate analyses were used to follow up on significant relations identified through bivariate analyses for aims one and two, as well as to examine study aim three, which sought to explore attachment as a moderator of the relation between BPD and dependent life stress. Because the average dependent life stress score was not associated with BPD, multivariate analyses focused only on the number of dependent life events in relation to BPD and attachment variables. Due to the assumption of normality being violated for the number of dependent life events variable, Poisson and Negative Binomial generalized linear models were examined for model fit. The Poisson probability distribution demonstrated poor fit, Goodness of Fit: *Deviance* = 269.06, *df* = 176, $p < .001$; however, the Negative Binomial probability distribution had an adequate fit, Goodness of Fit: *Deviance* = 134.96, *df* = 176, $p = .99$. Thus, the Negative Binomial generalized linear model was chosen to test the main effect of BPD (separate models for BPD continuous and categorical variables), the main effect of maternal availability (continuous), the main effect of maternal dependability (continuous), the interaction effect of BPD and availability (continuous), and the interaction effect of BPD and dependability (continuous) on

number of dependent life events (count). Sex (categorical) and race (categorical) were included as covariates in the model. Regarding the model testing the BPD diagnosis variable (categorical), the inclusion of these predictors was not a significant improvement over the intercept-only model, *Likelihood Ratio Chi-Square* = 5.24, *df* = 7, *p* = .63. In addition, the model testing the BPD features variable (continuous) was not a significant improvement over the intercept-only model, *Likelihood Ratio Chi-Square* = 6.48, *df* = 20, *p* = .99. Thus, individual main and interaction effects were not interpreted.

CHAPTER IV

Discussion

The present study aimed to examine the relation between BPD and dependent life stress, as well as the potential moderating role of attachment security. First, we hypothesized that BPD would be positively associated with dependent life stress, such that elevated BPD features or a BPD diagnosis would be associated with a higher average level of dependent life stress and an increased number of dependent life events. In this study, BPD features were not significantly associated with average dependent life stress; however, the number of dependent life events was significantly associated with adolescents' diagnostic group. These findings are thus consistent with previous research showing that BPD is positively correlated with both the number of overall stressful life events (Pagano et al., 2004; Perry et al., 1992), and dependent-specific stressful life events (Powers et al., 2013). Furthermore, the current study extends those results to a sample of low-income inpatient adolescents, as previous studies have only examined adults in this capacity.

Second, we expected that BPD and attachment would be negatively associated, in which an increase in the number of BPD features, or membership to the BPD diagnostic group would be associated with lower rates of maternal availability, dependability, and care, and higher rates of overprotection. Our findings indicated that neither BPD features nor diagnostic category were associated with care or overprotection, in contrast to the current literature (Bezirganian et al., 1993, Infurna et al., 2016; Schuppert et al., 2015). However, previous studies used different measures of care and overprotection when examining these constructs in relation to BPD, including the EMBU-C (Schuppert et al.,

2015), and a self-created measure (Bezirganian et al., 1993). While Infurna and colleagues (2016) did use the PBI to assess care and overprotection, participants' levels of maternal care and overprotection were dichotomized into "clinical" and "non-clinical" groups, thus differing from the current study's dimensional approach to attachment. Negative associations with availability and dependability were supported for both BPD features and BPD diagnostic category, confirming our hypothesis, bolstering previous research (Carlson et al., 2009), and extending it to an adolescent inpatient sample. Since the current study is the first of its kind to include all four attachment domains, our findings suggest that availability and dependability have a stronger relation to BPD and are quite possibly, the driving factors behind BPD's association with overall attachment in the previous literature. Future examination of the differences between these attachment domains should be undertaken to confirm this additional hypothesis.

Third, we expected that attachment would moderate the relation between BPD and dependent life stress. This hypothesis was not supported, as the overall generalized linear models examining BPD, attachment, and their interaction as predictors of dependent stress were not significant improvements upon the intercept-only models. Thus, while attachment has previously been identified as a protective factor attenuating the relation between psychopathology and dependent life stress (Bottonari et al., 2007), as well as life stress more broadly (Rotenberg et al., under review; Venta et al., under review), no evidence of such a role was noted in the current study. This stark difference in findings may best be explained by the type of attachment measure utilized. For instance, Bottonari and colleagues (2007) used an overall measure of attachment security, the Experience of Close Relationships (ECR) measure, which parses attachment into

avoidance and anxiety domains, rather than availability and dependability domains like the current study. Furthermore, a more sensitive measure of attachment, such as the Childhood Attachment Interview (CAI) may be warranted, as interview-based measures of attachment often do not overlap with self-report measures (Venta et al., 2014). Therefore, it may be the case that our self-report measures of attachment did not adequately tap into adolescents' attachment relationships, due to a lack of insight amongst our participants. Additionally, attachment may act as a buffer when examined longitudinally, rather than in a cross-sectional analysis like the current study. Finally, it may be possible that attachment simply cannot serve as a buffer for adolescents with BPD in the context of dependent life stress, given the lack of interpersonal skills and awareness that are at the heart of the disorder (APA, 2013).

Limitations and Directions for Future Study

This study need not be considered without limitation. Firstly, the current analyses were conducted from cross-sectional data and therefore, any causal inferences cannot be made. To improve upon this, longitudinal data using these same constructs should be obtained and analyzed, in order to determine if causal links exist among these variables. Additionally, answering biases and shared method variance cannot be eliminated as a possibility for those assessments that use self-report methods. Interview measures such as the CAI or observational methods should be attempted in future studies to reduce these potential sources of statistical noise, and have a more sensitive measure of attachment than self-reports. Another weakness in the current study was the disparity in BPD diagnostic category, in which only 58 participants were among the diagnosed group. While this group did represent nearly one-third of the sample, equal numbers of

diagnostic category distribution should be sought to eliminate power differences between groups. Finally, attachment in the current study was only explored as to adolescents' mothers, without regard for fathers and other caregivers. Future studies should aim to collect data on both parents, as paternal attachment may be of significant value and even moderate the maternal attachment relationship. Despite these limitations, the present study expands the current evidence base regarding relations between BPD features and diagnosis, attachment, and dependent life stress to an inpatient racially/ethnically diverse sample of adolescents.

The sample's diversity serves as a relative strength of the current study, as nearly two-thirds of the sample was of racial/ethnic minority status, the sample as a whole was low-income, and data were collected from an adolescent inpatient facility—an arguably understudied population. Furthermore, ours is the only study thus far to simultaneously measure availability, dependability, care, and overprotection within the attachment literature, allowing for a thorough exploration of attachment security variables among adolescents. Finally, the use of the CI-BPD permitted us to examine BPD on both dimensional and categorical levels, thus improving our ability to adequately measure both the features and diagnostic category of this disorder.

In sum, the present study established that BPD diagnosis was associated with dependent life stress, as well as both the availability and dependability attachment domains. However, the hypothesized effect of attachment as a moderator of the relation between BPD and dependent life stress was not noted. Still, the positive association found between BPD and dependent life stress may stand to inform intervention protocol, as dependent life stress could be made a focal point of treatment. Similar treatment

interventions have demonstrated promise among individuals with depression when attempting to reduce dependent life stress (Liu, 2013), and theorized to show greater utility within an adolescent population (Ozer et al., 2002). In addition, while the current study did not find evidence that attachment acts as a protective factor, incorporating the adolescent's parents or caregivers into the treatment intervention may still be useful by encouraging the caregivers' psychoeducation of stress-generating behaviors and its high occurrence among patients with BPD. Therefore, the impact of the present study lies in identifying these behaviors and targeting them for the sake of intervention, with the aim of not only reducing the behaviors themselves, but also the correlates of dependent life stress that have been established by the literature base.

REFERENCES

Agrawal, H. R., Gunderson, J., Holmes, B. M., & Lyons-Ruth, K. (2004). Attachment studies with borderline patients: A review. *Harvard Review of Psychiatry, 12*(2), 94-104. doi:10.1080/10673220490447218

Ainsworth, M. D., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Lawrence Erlbaum Associates.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

Ansell, E. B., Sanislow, C. A., Mcglashan, T. H., & Grilo, C. M. (2007). Psychosocial impairment and treatment utilization by patients with borderline personality disorder, other personality disorders, mood and anxiety disorders, and a healthy comparison group. *Comprehensive Psychiatry, 48*(4), 329-336. doi:10.1016/j.comppsych.2007.02.001

Bateman, A., & Fonagy, P. (2006). *Mentalization-based treatment for borderline personality disorder: A practical guide*. Oxford: Oxford University Press.

Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology, 4*(1, Pt.2), 1-103. doi:10.1037/h0030372

Bergman, K., Sarkar, P., Glover, V., & O'Connor, T. (2008). Quality of child-parent attachment moderates the impact of antenatal stress on child fearfulness. *Journal of Child Psychology and Psychiatry, 49*(10), 1089-1098. doi:10.1111/j.1469-7610.2008.01987.x

Bezirganian, S., Cohen, P., & Brook, J. S. (1993). The impact of mother-child interaction

on the development of borderline personality disorder. *American Journal of Psychiatry, 150*(12), 1836-1842. doi:10.1176/ajp.150.12.1836

Blonigen, D. M., Carlson, M. D., Hicks, B. M., Krueger, R. F., & Iacono, W. G. (2008). Stability and change in personality traits from late adolescence to early adulthood: A longitudinal twin study. *Journal of Personality, 76*(2), 229-266. doi:10.1111/j.1467-6494.2007.00485.x

Bornovalova, M. A., Hicks, B. M., Iacono, W. G., & Mcgue, M. (2009). Stability, change, and heritability of borderline personality disorder traits from adolescence to adulthood: A longitudinal twin study. *Development and Psychopathology, 21*(4), 1335-1353. doi:10.1017/s0954579409990186

Bottonari, K. A., Roberts, J. E., Kelly, M. A., Kashdan, T. B., & Ciesla, J. A. (2007). A prospective investigation of the impact of attachment style on stress generation among clinically depressed individuals. *Behaviour Research and Therapy, 45*(1), 179-188. doi:10.1016/j.brat.2006.01.003

Bowlby, J. (1982). *Attachment and loss. Vol. 1. Attachment*. London: Hogarth P. and the Institute of Psycho-Analysis.

Buitron, V., Hill, R. M., Pettit, J. W., Green, K. L., Hatkevich, C., & Sharp, C. (2016). Interpersonal stress and suicidal ideation in adolescence: An indirect association through perceived burdensomeness toward others. *Journal of Affective Disorders, 190*, 143-149. doi:10.1016/j.jad.2015.09.077

Cackowski, S., Reitz, A., Ende, G., Kleindienst, N., Bohus, M., Schmahl, C., & Krause-Utz, A. (2014). Impact of stress on different components of impulsivity in borderline personality disorder. *Psychological Medicine, 44*(15), 3329-3340.

doi:10.1017/s0033291714000427

Carlson, E. A., Egeland, B., & Sroufe, L. A. (2009). A prospective investigation of the development of borderline personality symptoms. *Development and Psychopathology, 21*(4), 1311-1334. doi:10.1017/s0954579409990174

Casey, B., Jones, R. M., Levita, L., Libby, V., Pattwell, S. S., Ruberry, E. J., . . . Somerville, L. H. (2010). The storm and stress of adolescence: Insights from human imaging and mouse genetics. *Developmental Psychobiology, 52*(3), 225-235. doi:10.1002/dev.20447

Chow, C. M., & Ruhl, H. (2014). Friendship and Romantic Stressors and Depression in Emerging Adulthood: Mediating and Moderating Roles of Attachment Representations. *Journal of Adult Development, 21*(2), 106-115. doi:10.1007/s10804-014-9184-z

Cohen, P., Crawford, T. N., Johnson, J. G., & Kasen, S. (2005). The Children in the Community Study of developmental course of personality disorder. *Journal of Personality Disorders, 19*(5), 466-486. doi:10.1521/pedi.2005.19.5.466

Compas, B. E., & Wagner, B. M. (1991). Psychosocial stress during adolescence: Intrapersonal and interpersonal processes. In *Adolescent stress: Causes and consequences*. New York: Aldine de Gruyter.

Compas, B. E., Davis, G. E., Forsythe, C. J., & Wagner, B. M. (1987). Assessment of major and daily stressful events during adolescence: The Adolescent Perceived Events Scale. *Journal of Consulting and Clinical Psychology, 55*(4), 534-541. doi:10.1037//0022-006x.55.4.534

Conway, C. C., Hammen, C., & Brennan, P. A. (2012). Expanding stress generation

theory: Test of a transdiagnostic model. *Journal of Abnormal Psychology, 121*(3), 754-766. doi:10.1037/a0027457

Conway, C. C., Hammen, C., & Brennan, P. A. (2015). Adolescent precursors of adult borderline personality pathology in a high-risk community sample. *Journal of Personality Disorders, 29*(3), 316-333. doi:10.1521/pedi_2014_28_158

Crowell, S. E., Beauchaine, T. P., & Linehan, M. M. (2009). A biosocial developmental model of borderline personality: Elaborating and extending Linehan's theory. *Psychological Bulletin, 135*(3), 495-510. doi:10.1037/a0015616

Daley, S. E., Burge, D., & Hammen, C. (2000). Borderline personality disorder symptoms as predictors of 4-year romantic relationship dysfunction in young women: Addressing issues of specificity. *Journal of Abnormal Psychology, 109*(3), 451-460. doi:10.1037//0021-843x.109.3.451

Deborde, A., Miljkovitch, R., Roy, C., Bigre, C. D., Pham-Scottez, A., Speranza, M., & Corcos, M. (2012). Alexithymia as a mediator between attachment and the development of borderline personality disorder in adolescence. *Journal of Personality Disorders, 26*(5), 676-688. doi:10.1521/pedi.2012.26.5.676

Fonagy, P., Leigh, T., Steele, M., Steele, H., Kennedy, R., Mattoon, G., . . . Gerber, A. (1996). The relation of attachment status, psychiatric classification, and response to psychotherapy. *Journal of Consulting and Clinical Psychology, 64*(1), 22-31. doi:10.1037/0022-006x.64.1.22

Fraley, R. C., Davis, K. E., & Shaver, P. R. (1998). Dismissing-avoidance and the defensive organization of emotion, cognition, and behavior. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 249-279).

New York, NY: Guilford Press.

Gladstone, G. L., & Parker, G. B. (2005). The role of parenting in the development of psychopathology: An overview of research using the Parental Bonding Instrument. In J. Hudson & R. Rapee (Eds.), *Psychopathology and the family* (pp. 21-34). Amsterdam: Elsevier.

Glenn, C. R., Bagge, C. L., & Osman, A. (2013). Unique associations between borderline personality disorder features and suicide ideation and attempts in adolescents. *Journal of Personality Disorders, 27*(5), 604-616. doi:10.1521/pedi_2013_27_102

Hammen, C. (1991). Generation of stress in the course of unipolar depression. *Journal of Abnormal Psychology, 100*(4), 555-561. doi:10.1037//0021-843x.100.4.555

Hammen, C., Rudolph, K., Weisz, J., Rao, U., & Burge, D. (1999). The context of depression in clinic-referred youth: Neglected areas in treatment. *Journal of the American Academy of Child & Adolescent Psychiatry, 38*(1), 64-71. doi:10.1097/00004583-199901000-00021

Hammen, C., Shih, J. H., & Brennan, P. A. (2004). Intergenerational transmission of depression: Test of an interpersonal stress model in a community sample. *Journal of Consulting and Clinical Psychology, 72*(3), 511-522. doi:10.1037/0022-006x.72.3.511

Hammen Lab. (2015, May 07). UCLA Life Stress Interview. Retrieved November 24, 2015, from http://hammenlab.psych.ucla.edu/chronic.html

Hill, R. M., Rey, Y., Marin, C. E., Sharp, C., Green, K. L., & Pettit, J. W. (2015). Evaluating the Interpersonal Needs Questionnaire: Comparison of the reliability,

factor structure, and predictive validity across five versions. *Suicide and Life-Threatening Behavior, 45*(3). doi: 10.1111/sltb.12129

Hosang, G. M., Korszun, A., Jones, L., Jones, I., McGuffin, P., & Farmer, A. E. (2012). Life-event specificity: Bipolar disorder compared with unipolar depression. The British Journal of Psychiatry, 201(6), 458-465. doi:10.1192/bjp.bp.112.111047

Infurna, M. R., Brunner, R., Holz, B., Parzer, P., Giannone, F., Reichl, C., . . . Kaess, M. (2016). The specific role of childhood abuse, parental bonding, and family functioning in female adolescents with borderline personality disorder. *Journal of Personality Disorders, 30*(2), 177-192. doi:10.1521/pedi_2015_29_186

Johnson, J. G., Cohen, P., Kasen, S., Skodol, A. E., & Oldham, J. M. (2008). Cumulative prevalence of personality disorders between adolescence and adulthood. *Acta Psychiatrica Scandinavica*, *118*(5), 410-413. doi:10.1111/j.1600-0447.2008.01231.x

Jovev, M., & Jackson, H. J. (2006). The relationship of borderline personality disorder, life events and functioning in an Australian psychiatric sample. *Journal of Personality Disorders, 20*(3), 205-217. doi:10.1521/pedi.2006.20.3.205

Kaess, M., Brunner, R., & Chanen, A. (2014). Borderline personality disorder in adolescence. *Pediatrics, 134*(4), 782-794. doi:10.1542/peds.2013-3677

Kerns, K. A., Schlegemilch, A., Morgan, T. A., & Abraham, M. M. (2005). Assessing attachment in middle childhood. In K. A. Kerns & R. A. Richardson (Eds.), *Attachment in middle childhood* (pp. 46-70). New York, NY: Guilford Press.

Kim, E. Y., Miklowitz, D. J., Biuckians, A., & Mullen, K. (2007). Life stress and the course of early-onset bipolar disorder. *Journal of Affective Disorders, 99*(1-3), 37-

44. doi:10.1016/j.jad.2006.08.022

Kim, S., Sharp, C., & Carbone, C. (2014). The protective role of attachment security for adolescent borderline personality disorder features via enhanced positive emotion regulation strategies. *Personality Disorders: Theory, Research, and Treatment, 5*(2), 125-136. doi:10.1037/per0000038

Levy, K. N. (2005). The implications of attachment theory and research for understanding borderline personality disorder. *Development and Psychopathology, 17*(04), 959-986. doi:10.1017/s0954579405050455

Levy, K. N., Johnson, B. N., Clouthier, T. L., Scala, W., & Temes, C. M. (2015). An attachment theoretical framework for personality disorders. *Canadian Psychology, 56*(2), 197-207. doi:10.1037/cap0000025

Linehan, M. (1993). *Cognitive–behavioral treatment of borderline personality disorder*. NY: Guilford Press.

Linehan, M. M., Comtois, K. A., Murray, A. M., Brown, M. Z., Gallop, R. J., Heard, H. L., . . . Lindenboim, N. (2006). Two-year randomized controlled trial and follow-up of Dialectical Behavior Therapy vs therapy by experts for suicidal behaviors and borderline personality disorder. *Archives of General Psychiatry, 63*(7), 757. doi:10.1001/archpsyc.63.7.757

Liu, J. (2004). Childhood externalizing behavior: Theory and implications. *Journal of Child and Adolescent Psychiatric Nursing, 17*(3), 93-103. doi:10.1111/j.1744-6171.2004.tb00003.x

Liu, R. T., & Alloy, L. B. (2010). Stress generation in depression: A systematic review of the empirical literature and recommendations for future study. *Clinical*

Psychology Review, 30(5), 582-593. doi:10.1016/j.cpr.2010.04.010

Liu, R. T. (2013). Stress generation: Future directions and clinical implications. *Clinical Psychology Review, 33*(3), 406-416. doi:10.1016/j.cpr.2013.01.005

London, M. J., Lilly, M. M., & Pittman, L. (2015). Attachment as a mediator between community violence and posttraumatic stress symptoms among adolescents with a history of maltreatment. *Child Abuse & Neglect, 42*, 1-9. doi:10.1016/j.chiabu.2014.11.002

Lyons-Ruth, K., & Jacobwitz, D. (1999). Attachment disorganization: Unresolved loss, rational violence, and lapses in behavioral and attentional strategies. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical implications.* (pp. 520-544). New York, NY: Guilford Press.

Lyons-Ruth, K., Choi-Kain, L., Pechtel, P., Bertha, E., & Gunderson, J. (2011). Perceived parental protection and cortisol responses among young females with borderline personality disorder and controls. *Psychiatry Research, 189*(3), 426-432. doi:10.1016/j.psychres.2011.07.038

MacIntosh, H. B., Godbout, N., & Dubash, N. (2015). Borderline personality disorder: Disorder of trauma or personality, a review of the empirical literature. *Canadian Psychology, 56*(2), 227-241. doi:10.1037/cap0000028

Main, M., & Cassidy, J. (1988). Categories of response to reunion with the parent at age 6: Predictable from infant attachment classifications and stable over a 1-month period. *Developmental Psychology, 24*(3), 415-426. doi:10.1037//0012-1649.24.3.415

Main, M., & Solomon, J. (1990). Procedures for identifying infants as

disorganized/disoriented during the Ainsworth strange situation. In M. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research, and intervention* (pp. 121-182). Chicago, IL: University of Chicago Press.

Muller, R. T., Thornback, K., & Bedi, R. (2012). Attachment as a mediator between childhood maltreatment and adult symptomatology. *Journal of Family Violence, 27*(3), 243-255. doi:10.1007/s10896-012-9417-5

National Institute of Mental Health. (2015). Borderline personality disorder. Retrieved November 10, 2015, from http://www.nimh.nih.gov/health/topics/borderline-personality-disorder/index.shtml#part_145389

Noblin, L., Venta, A., & Sharp, C. (2014). The Validity of the MSI-BPD among Inpatient Adolescents. *Assessment. 21(2)*, 210-217. doi:10.1177/1073191112473177

Ozer, E. M., MacDonald, T., & Irwin, C. E., Jr. (2002). Adolescent health care in the United States: Implications and projections for the new millennium. In J. Mortimer & R. Larson (Eds.), *The changing adolescent experience: Societal trends and the transition to adulthood* (pp. 129-174). Cambridge, UK: Cambridge University Press.

Padival, M. A., Blume, S. R., Vantrease, J. E., & Rosenkranz, J. A. (2015). Qualitatively different effect of repeated stress during adolescence on principal neuron morphology across lateral and basal nuclei of the rat amygdala. *Neuroscience, 291*, 128-145. doi:10.1016/j.neuroscience.2015.02.012

Pagano, M. E., Skodol, A. E., Stout, R. L., Shea, M. T., Yen, S., Grilo, C. M., . . . Gunderson, J. G. (2004). Stressful life events as predictors of functioning:

Findings from the Collaborative Longitudinal Personality Disorders Study. *Acta Psychiatrica Scandinavica, 110*(6), 421-429. doi:10.1111/j.1600-0447.2004.00398.x

Parker, G., Tupling, H., & Brown, L. B. (1979). A parental bonding instrument. *British Journal of Medical Psychology, 52*(1), 1-10. doi:10.1111/j.2044-8341.1979.tb02487.x

Perry, J. C., Lavori, P. W., Pagano, C. J., Hoke, L., & O'Connell, M. E. (1992). Life events and recurrent depression in borderline and antisocial personality disorders. *Journal of Personality Disorders, 6*(4), 394-407. doi:10.1521/pedi.1992.6.4.394

Powers, A. D., Gleason, M. E., & Oltmanns, T. F. (2013). Symptoms of borderline personality disorder predict interpersonal (but not independent) stressful life events in a community sample of older adults. *Journal of Abnormal Psychology, 122*(2), 469-474. doi:10.1037/a0032363

Ramos, V., Canta, G., De Castro, F., & Leal, I. (2014). Discrete subgroups of adolescents diagnosed with borderline personality disorder: A latent class analysis of personality features. *Journal of Personality Disorders, 28*(4), 463-482. doi:10.1521/pedi_2013_27_126

Rholes, W. S., Simpson, J. A., Tran, S., Martin, A. M., & Friedman, M. (2007). Attachment and information seeking in romantic relationships. *Personality and Social Psychology Bulletin, 33*(3), 422-438. doi:10.1177/0146167206296302

Rotenberg, K., Sharp, C., & Venta, A. The role of trust beliefs in significant others of adolescents with psychiatric disorders in their life stress, and internalizing psychopathology. Submitted, *Journal of Adolescence*.

Rudolph, K. D., & Hammen, C. (1999). Age and gender as determinants of stress exposure, generation, and reactivity in youngsters: A transactional perspective. *Child Development, 70*(3), 660-677. doi:10.1111/1467-8624.00048

Rudolph, K. D. (2008). Developmental influences on interpersonal stress generation in depressed youth. *Journal of Abnormal Psychology, 117*(3), 673-679. doi:10.1037/0021-843x.117.3.673

Schuppert, H. M., Albers, C. J., Minderaa, R. B., Emmelkamp, P. M., & Nauta, M. H. (2015). Severity of Borderline Personality symptoms in adolescence: Relationship with maternal parenting stress, maternal psychopathology, and rearing styles. *Journal of Personality Disorders, 29*(3), 289-302. doi:10.1521/pedi_2104_28_155

Scott, L. N., Levy, K. N., & Granger, D. A. (2013). Biobehavioral reactivity to social evaluative stress in women with borderline personality disorder. *Personality Disorders: Theory, Research, and Treatment, 4*(2), 91-100. doi:10.1037/a0030117

Sharp, C., & Bleiberg, E. (2007). Borderline personality disorder in children and adolescents. In A. Martin and F. Volkmar (Eds.), *Lewis's child and adolescent psychiatry: Comprehensive textbook* (4th ed., pp. 680 – 691). Baltimore, MD: Lippincott Williams and Wilkins.

Sharp, C., & Fonagy, P. (2008). Social cognition and attachment-related disorders. In C. Sharp, P. Fonagy & I. Goodyer (Eds.), *Social cognition and developmental psychopathology* (pp. 271–302). Oxford, UK: Oxford University Press. doi:10.1093/med/9780198569183.003.0010

Sharp, C., Ha, C., Michonski, J., Venta, A., & Carbone, C. (2012). Borderline personality disorder in adolescents: Evidence in support of the Childhood Interview for DSM-IV Borderline Personality Disorder in a sample of adolescent inpatients. *Comprehensive Psychiatry*, *53*(6), 765-774. doi:10.1016/j.comppsych.2011.12.003

Sharp, C., Venta, A., Vanwoerden, S., Schramm, A., Ha, C., Newlin, E., . . . Fonagy, P. (2016). First empirical evaluation of the link between attachment, social cognition and borderline features in adolescents. *Comprehensive Psychiatry, 64*, 4-11. doi:10.1016/j.comppsych.2015.07.008

Shevlin, M., Dorahy, M., Adamson, G., & Murphy, J. (2007). Subtypes of borderline personality disorder, associated clinical disorders and stressful life-events: A latent class analysis based on the British Psychiatric Morbidity Survey. *British Journal of Clinical Psychology, 46*(3), 273-281. doi:10.1348/014466506x150291

Shmueli-Goetz, Y., Target, M., Fonagy, P., & Datta, A. (2008). The Child Attachment Interview: A psychometric study of reliability and discriminant validity. *Developmental Psychology, 44*(4), 939-956. doi:10.1037/0012-1649.44.4.939

Stiglmayr, C. E., Ebner-Priemer, U. W., Bretz, J., Behm, R., Mohse, M., Lammers, C., . . . Bohus, M. (2008). Dissociative symptoms are positively related to stress in borderline personality disorder. *Acta Psychiatrica Scandinavica, 117*, 139-147. doi:10.1111/j.1600-0447.2007.01126.x

Substance Abuse and Mental Health Services Administration. (2011). *Report to Congress on borderline personality disorder HHS publication no. SMA-11-4644* (United States, U.S. Department of Health and Human Services).

Sumter, S. R., Bokhorst, C. L., Miers, A. C., Van Pelt, J., & Westenberg, P. M. (2010). Age and puberty differences in stress responses during a public speaking task: Do adolescents grow more sensitive to social evaluation? *Psychoneuroendocrinology, 35*(10), 1510-1516. doi:10.1016/j.psyneuen.2010.05.004

Suzuki, H., & Tomoda, A. (2015). Roles of attachment and self-esteem: Impact of early life stress on depressive symptoms among Japanese institutionalized children. *BMC Psychiatry, 15*(8), 1-11. doi:10.1186/s12888-015-0385-1

Van Ryzin, M. J., & Leve, L. D. (2012). Validity evidence for the security scale as a measure of perceived attachment security in adolescence. *Journal of Adolescence, 35*(2), 425-431. doi:10.1016/j.adolescence.2011.07.014

Venta, A., & Sharp, C. (2013). Extending the concurrent validity of the Self-Injurious Thoughts and Behaviors Interview to inpatient adolescents. *Journal of Psychopathology and Behavioral Assessment, 36*(4), 675-682. doi:10.1007/s10862-013-9402-1

Venta, A., Hatkevich, C., Sharp, C., & Rotenberg, K. Emotional trust in mothers serves as a buffer against suicide attempts in inpatient adolescents with depressive symptoms. Revise and resubmit, *Journal of Social and Clinical Psychology*.

Venta, A., Herzhoff, K., Cohen, P., & Sharp, C. (2014). The longitudinal course of Borderline Personality Disorder in youth. In C. Sharp & J. Tackett (Eds.), *Handbook of Borderline Personality Disorder in Children and Adolescents* (pp. 229-246). New York, NY US: Springer.

Venta, A., Mellick, W., Schatte, D., & Sharp, C. (2014). Preliminary evidence that thoughts of thwarted belongingness mediate the relation between level of

attachment insecurity and depression and suicide-related thoughts in inpatient adolescents. *Journal of Social and Clinical Psychology. 33(5)*, 428-447. doi: 10.1521/jscp.2014.33.5.428

Venta, A., Ross, E., Schatte, D., & Sharp, C. (2012). Suicide Ideation and Attempt among Inpatient Adolescents with Borderline Personality Disorder: Frequency, Intensity, and Age of Onset. *Personality and Mental Health, 6,* 340-351. doi: 10.1002/pmh.1202

Venta, A., Sharp, C., & Newlin, E. (2014). A descriptive study of symptom change as a function of attachment and emotion regulation in a naturalistic adolescent inpatient setting. *European Child & Adolescent Psychiatry, 24*(1), 95-104. doi:10.1007/s00787-014-0532-0

Venta, A., Shmueli-Goetz, Y., & Sharp, C. (2014). Assessing attachment in adolescence: A psychometric study of the Child Attachment Interview. *Psychological Assessment, 26*(1), 238-255. doi:10.1037/a0034712

Verschueren, K., & Marcoen, A. (2005). Perceived security of attachment to mother and father: Developmental differences and relations to self-worth and peer relationships at school. In K. A. Kerns & R. A. Richardson (Eds.), *Attachment in middle childhood*. New York, NY: Guilford Press.

Wright, A. G., Zalewski, M., Hallquist, M. N., Hipwell, A. E., & Stepp, S. D. (2015). Developmental trajectories of borderline personality disorder symptoms and psychosocial functioning in adolescence. *Journal of Personality Disorders, 29,* 1-22. doi:10.1521/pedi_2015_29_200

Yalch, M. M., Hopwood, C. J., Fehon, D. C., & Grilo, C. M. (2014). The influence of

borderline personality features on inpatient adolescent suicide risk. *Personality Disorders: Theory, Research, and Treatment, 5*(1), 26-31. doi:10.1037/per0000027

Yen, S., Pagano, M. E., Shea, M. T., Grilo, C. M., Gunderson, J. G., Skodol, A. E., . . . Zanarini, M. C. (2005). Recent life events preceding suicide attempts in a personality disorder sample: Findings from the collaborative longitudinal Personality Disorders study. *Journal of Consulting and Clinical Psychology, 73*(1), 99-105. doi:10.1037/0022-006x.73.1.99

VITA

Ericka Ball

PROFESSIONAL EXPERIENCE

Graduate Research Assistant **September 2015-Present**
Sam Houston State University, Huntsville, TX

- Conduct case law reviews on civil and criminal cases
- Assist in mentoring undergraduate students on research projects
- Assist in writing publications and collecting data

Graduate Teaching Assistant **September 2015-August 2016**
Sam Houston State University, Huntsville, TX

- Provided support to college freshmen, as well as groups of other high-risk students
- Taught and mentored students for an introduction to collegiate studies class
- Created bimonthly newsletters to disseminate information to high-risk students

Child Assessor/Graduate Research Assistant **August 2013-August 2015**
University of Texas at Dallas, Dallas Preschool Readiness Project Lab, Richardson, TX

- Assessed executive functioning and academic achievement in a sample of low-income ethnic minority children through a longitudinal research project.
- Worked with data by running and analyzing statistical tests in SPSS.
- Coded parent-child interactions and assisted in developing coding scales.
- Coordinated and provided training to new and established child assessors.

Child Protective Investigator **July 2010-July 2013**
Hillsborough County Sheriff's Office, Tampa, FL

- Investigated alleged abuse, neglect, and/or abandonment of children through interviews with parents and children, as well as home visits
- Took action, if necessary, to ensure child safety; involvement with the court system and social services in these cases by testifying in court and preparing court documents
- Worked with law enforcement, detention services, and attorneys
- Testified multiple times in the juvenile dependency court
- Field Training Investigator (May 2012 – July 2013)
- 3 commendations on file related to community service, quality of work, and going above and beyond the required aspects of the job

911 Dispatcher **June 2007-July 2010**
Tampa Police Department, Tampa, FL

- Answered approximately 100-150 emergency calls per shift and determined call priority
- Dispatched police officers while maintaining communication with citizens to ensure both officer and citizen safety

EDUCATION

Ph.D., Clinical Psychology GPA: 4.0
Sam Houston State University, Huntsville, TX Expected Graduation: August 2020

M.S., Psychological Sciences GPA: 4.0
University of Texas at Dallas, Richardson, TX Graduated: May 2015
- Completed 20 hours/week in developmental psychology research lab

B.A. Psychology, B.S. Criminology GPA: 3.78
University of Tampa, Tampa, FL Graduated: May 2010
- Magna Cum Laude, Dean's List
- 3.87 Major GPA for Psychology; 3.83 Major GPA for Criminology

MANUSCRIPTS UNDER REVIEW

Ball, E. M., Abate, A. C., Airrington, M. D., L. K., & Venta, A. C (under review). *When and how do race and ethnicity explain patterns of dysfunctional discipline?* Paper submitted to Parenting: Science and Practice.

MANUSCRIPTS IN PREPARATION

Ball, E.M., Venta, A., & Sharp, C. The moderating role of maternal attachment on Borderline Personality Disorder features and dependent life stress. (Thesis)

Magyar, M.S., **Ball, E.M.**, & Hart, J. Borderline features: Critical mediator in the relation between childhood maltreatment and diverse aggressive and delinquent features among justice-involved youth.

Caughy, M.O., Owen, M.T., **Ball, E.M.**, & Pacheco, D. Physical discipline and socioemotional development in low-income ethnic minority preschoolers: The moderating role of maternal parenting qualities.

PROFESSIONAL PRESENTATIONS

Ball, E. M., Airrington, M. D., Abate, A. C., Taylor, L. K., & Venta, A. C. (November 2016). *When and how do race and ethnicity explain patterns of dysfunctional discipline?* Poster submitted for presentation at the 2016 Texas Psychological Association Annual Conference, Austin, TX.

Magyar, M.S., **Ball, E.M.**, & Hart, J. R. (June 2016). *Borderline features: Critical mediator in the relation between childhood maltreatment and diverse aggressive and delinquent features among justice-involved youth.* Paper accepted for presentation at the 2016 International Association of Forensic Mental Health Services Annual Conference, New York, NY.

Abate, A.C., Magyar, M.S., **Ball, E.M.**, Ricardo, M., Hart, J., & Edens, J. (March 2016). *Use of the Personality Assessment Inventory-Adolescent to assess trauma-related symptoms in justice-involved youth.* Paper accepted for presentation at the 2016 American Psychology-Law Society Annual Meeting, Atlanta, GA.

Hart, J.R., Magyar, M.S., **Ball, E.M.**, Camins, J., & Ridge, B. (March 2016). *Using the Personality Assessment Inventory-Adolescent to predict high-risk behaviors among juvenile male offenders.* Paper accepted for presentation at the 2016 American Psychology-Law Society Annual Meeting, Atlanta, GA.

PROFESSIONAL MEMBERSHIPS

- International Association of Forensic Mental Health Services (IAFMHS)
- American Psychological Association (APA)
- American Psychology and Law Society (AP-LS)
- Texas Psychological Association (TPA)

CERTIFICATIONS & QUALIFICATIONS

- Child Protective Investigator (CPI) Certification-April 24, 2011
- Qualified Expert Witness, Hillsborough County 13th Judicial Circuit Civil Court regarding child abuse, neglect and abandonment, as well as child safety and risk assessment